## Gulch, Jon

From: Johnson, Mark

Sent: Wednesday, September 10, 2014 5:17 PM

To: Gulch, Jon

Cc: Colledge, Michelle; lisa\_williams@fws.gov; Karecki, Edward; McGovern, Amy

Subject: RE: SDS and product data

Jon

Here is some additional information about the compounds in the Chromatint Red product:

- 1) Urea- the main environmental concern would be the high oxygen demand that urea would make in water, which would be a stressor for fish and other aquatic organisms. Measuring oxygen levels in the water downstream from where it has been released to be useful to monitor.
- 2) Acid Yellow 23 (CAS 1934-21-0)- This is an azo dye, also known as Tartrazine, that is used in a wide variety of food and other consumer products. It is an EPA-registered algaecide/herbicide. Here are some properties:
  - a. High water solubility
  - b. Not expected to readily bind to soil or sediment particles,
  - c. Non-volatile
  - d. Low rate of chemical or biological degradation in water, but some limited photodegradation
  - e. Available mammalian toxicity data does not indicate significant acute or chronic toxicity
  - f. Action as an algaecide is to absorb the wavelengths of light that algae need for photosynthesis
- 3) Acid Red 1 (CAS 3734-67-6)- Also an azo dye that is used as a food additive. It was difficult to find information about this chemical, since it was not listed in the Hazardous Substances Data Bank and the MSDS for Acid Red had no toxicological or physical/chemical properties description. The only potential issue was an indication that it could breakdown into aniline, which is carcinogenic and able to bind to hemoglobin. However, no information about the extent of that breakdown in the environment.

Mark

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Mark D. Johnson, PhD, DABT

Regional Director/ Senior Environmental Health Scientist Agency for Toxic Substances and Disease Registry (ATSDR)

77 West Jackson Blvd. Chicago, IL 60604

e-mail: mdjohnson@cdc.gov phone: 312-353-3436 (office)

From: Johnson, Mark

Sent: Wednesday, September 10, 2014 10:41 AM

To: Gulch, Jon

Cc: Michelle Colledge

Subject: RE: SDS and product data

Jon

Do we have any estimates of the volume of powdered dye that could be released from this facility? I also wanted to confirm the waterbody that this area would drain into before reaching Lake Erie. Are there municipal water intakes in Lake Erie near the where this material could discharge into the lake?

I don't know if this is the Fish and Wildlife Service person you mentioned, but Lisa Williams (517-351-8324; lisa\_williams@fws.gov) out of the East Lansing office covers Michigan.

Give me a call and we can talk further.

Mark

Mark D. Johnson, PhD, DABT Regional Director/ Senior Environmental Health Scientist Agency for Toxic Substances and Disease Registry (ATSDR) 77 West Jackson Blvd.

Chicago, IL 60604

e-mail: <a href="mdjohnson@cdc.gov">mdjohnson@cdc.gov</a> phone: 312-353-3436 (office)

From: Gulch, Jon

Sent: Tuesday, September 09, 2014 9:18 PM

To: Johnson, Mark

Subject: Fw: SDS and product data

Please find attached the MSDS for the dye spilled.

Thanks.

From: Krause, Kevin <kkrause@CI.ROMULUS.MI.US>

Sent: Tuesday, September 9, 2014 8:56 PM

To: Gulch, Jon

Subject: Fwd: SDS and product data

Please e-mail back confirmation of this msds sheet.

Sent on the new Sprint Network from my Samsung Galaxy S®4.

----- Original message -----

From: Michael Stadler

Date:09/09/2014 8:48 PM (GMT-05:00)

To: kkrause@ci.romulus.mi.us

Subject: Fwd: SDS and product data